

WHAT IS CLAIMED IS:

1. A communication system comprising:

a client including setting means for setting a
parameter and notification means for notifying the
5 parameter set by said setting means;

a gateway apparatus including acquisition means for
generating an information acquisition request on the basis
of the parameter notified by said notification means,
information storage means for temporarily storing
10 information received in response to the acquisition
request generated by said acquisition request means, and
information transfer means for transferring the
information stored in said information storage means to
said client; and

15 an information source server including information
storage means for storing the information acquired by said
acquisition request means, and information transmission
means for transmitting the information stored in said
information storage means to said gateway apparatus upon
20 reception of the acquisition request.

2. A communication system comprising:

a client including creation request means for
requesting creation of an agent for information
acquisition and notification means for notifying a
25 parameter to be set in the agent created by said creation

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request means;

5 a gateway apparatus including storage means for storing the parameter for each agent, storage area reservation means for reserving a predetermined storage area in said storage means for each agent for which a creation request is generated by said creation request means, parameter setting means for setting the parameter notified by said notification means in the storage area reserved by said storage area reservation means, and an agent for generating an information acquisition request on 10 the basis of the parameter set by said parameter setting means, temporarily storing information received via a radio data communication network in response to the acquisition request, and transferring the information to 15 said client; and

an information source server including information storage means, connected to said gateway apparatus via the radio data communication network, for storing information for which an acquisition request is generated by said 20 agent in advance, and information transmission means for transmitting the information stored in said information storage means to said gateway apparatus upon reception of the acquisition request.

3. A system according to claim 2, wherein said 25 client comprises operation stop instructing means for

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generating an instruction to stop operation of said agent,
and said gateway apparatus comprises agent stopping means
for stopping the operation of said agent when an operation
stop instruction is generated by said operation stop
5 instructing means.

4. A system according to claim 2, wherein said
client comprises delete instructing means for generating
an instruct to delete said agent, and said gateway
apparatus comprises storage area releasing means for
10 releasing a storage area reserved in said storage means in
correspondence with a designated agent when the delete
instruction is generated by said delete instructing means.

5. A system according to claim 3, wherein said
client comprises delete instructing means for generating
15 an instruct to delete said agent, and said gateway
apparatus comprises storage area releasing means for
releasing a storage area reserved in said storage means in
correspondence with a designated agent when the delete
instruction is generated by said delete instructing means.

20 6. A system according to claim 1, wherein the
parameter includes at least one of attribute information
indicating a display capability and processing capability
of said client, attribute information indicating
communication capabilities between said client and said
25 gateway apparatus and between said gateway apparatus and

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said server, and predetermined preference information designated by a user of said client.

7. A system according to claim 2, wherein the parameter includes at least one of attribute information indicating a display capability and processing capability of said client, attribute information indicating communication capabilities between said client and said gateway apparatus and between said gateway apparatus and said server, and predetermined preference information designated by a user of said client.

8. A system according to claim 3, wherein the parameter includes at least one of attribute information indicating a display capability and processing capability of said client, attribute information indicating communication capabilities between said client and said gateway apparatus and between said gateway apparatus and said server, and predetermined preference information designated by a user of said client.

9. A system according to claim 4, wherein the parameter includes at least one of attribute information indicating a display capability and processing capability of said client, attribute information indicating communication capabilities between said client and said gateway apparatus and between said gateway apparatus and said server, and predetermined preference information

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designated by a user of said client.

10. A communication method comprising:

the creation request step of causing a client for
displaying acquired information to request a gateway
5 apparatus to create an agent for information acquisition;

the area reservation step of causing the gateway
apparatus to reserve a predetermined storage area for each
agent whose creation is requested in the creation request
step;

10 the parameter setting step of causing the gateway
apparatus to set the parameter notified for each agent by
the client in the storage area reserved in the area
reservation step;

the acquisition request step of causing an agent in
15 the gateway apparatus to generate an acquisition request
to a server storing various kinds of information on the
basis of the parameter set by the parameter setting means;

the information transmission step of extracting
information for which the acquisition request is generated
20 in the acquisition request step and causing the sever to
transmit the information to the gateway apparatus via a
radio data communication network; and

the transfer step of temporarily storing information
transmitted in the information transmission step and
25 causing the gateway apparatus to transfer the information

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to the client.

11. A method according to claim 10, further comprising causing the agent to stop operation or release the storage area reserved in correspondence with the agent
5 on the basis of an operation stop instruction or delete instruction from the client.

12. A method according to claim 10, wherein the parameter includes at least one of attribute information indicating a display capability and processing capability
10 of said client, attribute information indicating communication capabilities between said client and said gateway apparatus and between said gateway apparatus and said server, and predetermined preference information designated by a user of said client.

13. A method according to claim 11, wherein the parameter includes at least one of attribute information indicating a display capability and processing capability
15 of said client, attribute information indicating communication capabilities between said client and said gateway apparatus and between said gateway apparatus and said server, and predetermined preference information designated by a user of said client.
20

14. A gateway apparatus comprising:

storage means for storing a parameter set for each
25 agent;

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storage area reservation means for reserving a predetermined storage area in said storage means for each agent when creation of an agent for information acquisition is requested;

- 5 parameter setting means for setting the parameter in the storage area reserved by said storage area reservation means; and

an agent for generating an information acquisition request on the basis of the parameter set by said
10 parameter setting means, temporarily storing information received via a radio data communication network in accordance with the acquisition request, and transferring the information to the request source which has generated the agent creation request.

- 15 15. An apparatus according to claim 14, wherein when an operation stop instruction is generated for said agent, operation of said agent is stopped.

16. An apparatus according to claim 14, wherein when a delete instruction is generated for said agent, a
20 storage area reserved in said storage means is released in correspondence with a designated agent.

17. An apparatus according to claim 15, wherein when a delete instruction is generated for said agent, a storage area reserved in said storage means is released in
25 correspondence with a designated agent.

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18. An apparatus according to claim 14, wherein the parameter includes at least one of attribute information indicating a display capability and processing capability of the request source which has generated the agent
5 creation request, attribute information indicating communication capabilities between the request source and said gateway apparatus and between said gateway apparatus and the information transmission source which has generated the acquisition request, and predetermined
10 preference information designated by a user of the request source.

19. An apparatus according to claim 15, wherein the parameter includes at least one of attribute information indicating a display capability and processing capability
15 of the request source which has generated the agent creation request, attribute information indicating communication capabilities between the request source and said gateway apparatus and between said gateway apparatus and the information transmission source which has
20 generated the acquisition request, and predetermined preference information designated by a user of the request source.

20. An apparatus according to claim 16, wherein the parameter includes at least one of attribute information
25 indicating a display capability and processing capability

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of the request source which has generated the agent
creation request, attribute information indicating
communication capabilities between the request source and
said gateway apparatus and between said gateway apparatus
5 and the information transmission source which has
generated the acquisition request, and predetermined
preference information designated by a user of the request
source.

21. An apparatus according to claim 17, wherein the
10 parameter includes at least one of attribute information
indicating a display capability and processing capability
of the request source which has generated the agent
creation request, attribute information indicating
communication capabilities between the request source and
15 said gateway apparatus and between said gateway apparatus
and the information transmission source which has
generated the acquisition request, and predetermined
preference information designated by a user of the request
source.

20 22. A client comprising:

creation request means for requesting creation of an
agent for information acquisition;

notification means for notifying a parameter to be
set in the agent created by said creation request means;

25 and

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information acquisition means for generating the information acquisition request by using the agent created by said creation request means on the basis of the parameter notified by said notification means, and
5 acquiring information via a radio data communication network.

23. A client according to claim 22, wherein operation of the agent created by said creation request means is stopped or the agent is deleted by generating an operation
10 stop instruction or delete instruction for the agent.

24. A client according to claim 22, wherein the parameter includes at least one of attribute information indicating a display capability and processing capability of said client, attribute information indicating
15 communication capability with respect to the transmission source which has generated the acquisition request, and predetermined preference information designated by a user.

25. A client according to claim 23, wherein the parameter includes at least one of attribute information
20 indicating a display capability and processing capability of said client, attribute information indicating communication capability with respect to the transmission source which has generated the acquisition request, and predetermined preference information designated by a user.

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